REMARKS

The claims are amended to overcome the Notice of Non-Compliant Amendment. No new matter is added.

Claim 9 is amended herein to correct a typographical error wherein the outward antenna assembly boundary was claimed to be unbonded to the tire when as will be appreciated it is the inward antenna assembly boundary, as presented earlier in lines 6 and 7 of the claim (reciting the boundary enclosed by the recess), that is the unbonded boundary relative to the tire. Claim 9 as presently amended is now consistent as to the references to the inner and outward antenna assembly boundaries. No new matter is presented as such a configuration is recited in the specification and shown in FIGS. 3 and 4. Correction of the mistyping an entry of the amendment and entry of the amendments to the claims is requested.

35 U.S.C. §112, first paragraph

Claims 9-13 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant disagrees with the rejection and maintains claims 9-13 as amended are in full statutory compliance. There is no basis in the specification that the antenna must be claimed as "annular" for one skilled in the art to practice the invention claimed. The specification clearly recites at page 5, para. 15 that the "recess 66 is configured and dimensioned to receive antenna assembly 10 therein as shown in FIGS. 3, 4". No recitation that the recess 66 must be annular form is presented. Nor would one skilled in the art fail to understand that the recess 66 configuration and dimension is derivative of the configuration and dimension of the antenna assembly 10. Use of "configuration and dimension" in its ordinary meaning would convey to one skilled in the art that the inventors at the time of the application contemplated a dimensional and configuration correlation between the recess and the antenna assembly 10 and nothing more. There is no

question that the specification and description teach forming within a rigid core a core recess "complementarily configured" as originally presented in claim 9-13. Moreover, as presented at page 5, para. 16 of the specification: "The recess 66 preferably extends in a circular path about the core 48, *however, a non-circular or irregular path may also be employed"* (emphasis added). Clearly the invention as recited in the specification conveys to one skilled in the art that the recess, and hence the antenna assembly 10, may take a non-circular (*i.e.*, non-annular) or irregular form. No new matter is therefore considered by amendment of claims 9-13 to recite an antenna assembly and recess that may have a non-circular or irregular form.

35 U.S.C. § 102(b)

Claims 9 through 13 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Fritze (US 3,662,335). This rejection is respectfully traversed for the following reasons.

The courts have held that under 35 U.S.C. § 102 a "claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Herein, Fritze '335 does not disclose:

a tire having an antenna assembly having an inward peripheral boundary and an exposed outward peripheral boundary;

a tire having an antenna assembly in which an outward boundary of the antenna assembly is cross-bonded to the inner surface of the tire; and

a tire having an antenna assembly in which an outward antenna assembly boundary is unbonded to the tire and faces an inner cavity of the tire.

Thus, Fritze '335 does not disclose each and every element and fails to anticipate the claimed invention.

The Examiner has in the subject Office Action acknowledged and admitted that Fritze discloses "an annular antenna assembly vulcanized to the *inside* (emphasis added by Applicants) of the tire" and so it does. However, the Examiner overlooks the limitations in claim 9 as summarized above that state that one antenna assembly boundary is *unbonded* to the tire while facing the tire cavity while another boundary is cross-bonded to the *inner surface* of the tire. In order to determine whether Fritze anticipates the claims, therefore, it is essential to resolve the following issues:

1. Does Fritze disclose an antenna assembly and, if so, what are the inner and outer boundaries of such an assembly in Fritze.
2. Is an antenna assembly outward boundary in Fritze *cross-bonded to the inner surface* of the tire during a cure cycle as required by claim 9.
3. Is an antenna assembly inner boundary in Fritze *unbonded to the tire* and *facing an inner cavity* of the tire.

Applicants submit that Fritze discloses an antenna assembly designated by numeral 20. However, as the Examiner admits, assembly 20 is vulcanized to the *inside* of a tire and that, as such, by definition the assembly 20 does not and cannot have an inner boundary that is unbonded to the tire and facing an inner cavity of the tire. Nor is the outward boundary of the Fritze assembly 20 (being within the tire as the Examiner notes) cross-bonded to an inner surface of a tire. The assembly 20 in Fritze, Applicants submit, is embedded within a lower wall of the tire and not affixed by cross-bonding to an inner surface the a tire.

The Examiner refers specifically to FIG. 2 of Fritze but has not identified what boundaries of the Fritze *antenna assembly 20* are being relied upon to meet the limitations of in inner and outer antenna assembly boundary recited in the rejected claims. Fritze states in Column 3, lines 45-49: "The components constituting the coupling element or the oscillator-antenna unit in these figures are in the form of one or more copper strands 20 extending about

the circumference of the wheel in proximity to the rim outer edge and in parallelism to one another". Thus, it is assembly 20 as defined in Fritze that must meet the limitations of pending and rejected claims.

The same antenna assembly 20 in Fritze is shown in FIGS. 2, 3, and 4 at different mounting locations. None of the locations, however, situate the assembly 20 such that an inner boundary of the assembly 20 is unbonded to the tire and faces an inner tire chamber. It is noted that the reference line to element 20 of Fritze in FIG. 2, on which the Examiner directly relies, extends through the inward surface of the tire, through the tire material surrounding the unit 20, and terminates on the embedded unit 20. Likewise, in FIG. 3 and 4 the reference line projects through the inner boundary of the rim to the embedded unit 20. The Examiner's characterization of Fritze element 20 as meeting the claim limitations is, accordingly, a mischaracterization for the Fritze element 20 does not have (and the Examiner has not identified) an outward boundary *cross-bonded to the inner surface* of the tire during a cure cycle as required by claim 9. Nor does the Fritze element 20 have (and the Examiner has not identified) an inner boundary *unbonded to the tire* and *facing an inner cavity* of the tire

The limitations discussed above are therefore not met by Fritze *in a tire as claimed* (emphasis added) and the rejection under 35 U.S. C. 102 is erroneous and unfounded.

As Fritze fails to anticipate the invention as recited in claims 9 through 13, it is respectfully requested that this rejection be withdrawn.

In specific response to the Advisory Action, Applicants hereby submit that the sole amendment to claim 9 made previously is to make the identification of the inward boundary of the antenna assembly in claim 9, line 14 consistent with the lines 6 and 7 and to place the claim in better form for the subject appeal. Refusal to enter the correction to claim 9 is noted but deemed unreasonable. Reconsideration is requested.

Regarding the remarks presented by the Examiner in the Advisory Action, claim 9 is clear that the process comprises the step of "positioning the antenna assembly within the core recess". Therefore, the antenna assembly of the claimed invention cannot be deemed to be "inside a tire" as that term is used in Fritze and as the Fritze reference clearly shows in Fig. 2. Strands 20, as the Examiner notes, are within the tire sidewall in Fritze. The lead line from numeral 20 clearly extends through the tire material surrounding antenna 20 to the antenna 20 structure. The Examiner admits that the antenna 20 in Fritze is embedded in surrounding material. The antenna 20 of Fritze, therefore, could not have been formed by "positioning the antenna assembly (20 in Fritze) within a core recess"; "building an uncured carcass of the tire around the rigid core and over the antenna assembly boundary, an inner surface of the tire entrapping the antenna assembly within the core recess" as required by the claims.

Moreover, claim 9 requires a cross bonding of the antenna assembly outward boundary to the inner surface of the tire during a cure cycle. The outward boundary of the antenna assembly must therefore be adjacent to and in contact with the inner surface of the tire during the cure cycle. In Fritze, there is no outward surface of the antenna assembly 20 that is adjacent to and in contact with the inner surface of the tire during the cure cycle. To include the material surrounding the antenna 20 of Fritze as part of the antenna contradicts the literal definition in Fritze as designated by numeral 20.

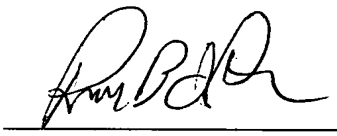
The reproduction of Fritze FIG. 2 in the Advisory Action designates a surface of the tire that is not contacted at all by the antenna assembly 20. The Fritze construction, Applicants maintain, is to embed the antenna assembly 20 within the tire sidewall, not affix the assembly to an inside tire surface as required. This process is different from the process as claimed and results in a tire structure that does not anticipate the claimed invention.

In summary, the Fritze tire and antenna assembly explicitly does not practice the claimed process as set forth in claim 9. The Examiner's suggestion that the claims simply

require a tire with an antenna assembly vulcanized to the tire inside and protruding therefrom is simply incorrect. There must be, according to the claims, a surface to surface bonding between the antenna assembly and the tire inside surface and there must further be a resultant tire structure in which the antenna assembly, not the tire sidewall, protrudes into a tire cavity unbonded to the tire. Fritze shows no such surface-to-surface bonding between the antenna assembly 20 and the tire inside surface.

In light of this amendment, all of the claims now pending in the subject patent application are allowable. Thus, the Examiner is respectfully requested to allow all pending claims.

Respectfully submitted,



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